GOVERNMENT OF INDIA
SPACE
LOK SABHA

UNSTARRED QUESTION NO:2640
ANSWERED ON:08.08.2001
ACHIEVEMENT OF INDIAN SCIENTISTS ON SPACE RESEARCH
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Will the Minister of SPACE be pleased to state:

(a) the details of the significant achievements of Indian Scientists in the context of Space Research;

(b) whether the country has attained maximum utilisation of space technology for weather prediction, telecommunications and identifications of natural resources; and (

(c) if so, the details thereof?.

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SMALL SCALE INDUSTRIES & AGRO AND RURAL INDUSTRIES, MINISTER OF STATE IN THE DEPARTMENT OF PERSONNEL AND TRAINING, DEPARTMENT OF PENSIONS AND PENSIONERS WELFARE OF THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS, DEPARTMENT OF ATOMIC ENERGY AND DEPARTMENT OF SPACE (SMT. VASUNDHARA RAJE)

(a) The significant achievements of Indian Scientists in Space research in Indiaare self-reliant development of world class satellites and launch vehicles/rockets and utilizing space systems in areas relevant to national development in a cost-effective manner. India has established two indigenously built operational space systems viz., Indian Remote Sensing Satellites (IRS) and Indian National Satellite System (INSAT) contributing tothe national development in various fronts. India`s Polar Satellite LaunchVehicle (PSLV) is well proven through four successive successful flights and it provides self-reliant launch capability to orbit remote sensing satellites of 1.2 Tonne class in Polar Sun-synchronous orbits. The successful flight of Geo-synchronous Satellite Launch Vehicle (GSLV) on 18th April, 2001 is a major landmark in the Indian Space Programme making India the sixth country in the world to demonstrate capabilities for geo-stationary satellite launch. Front ranking scientific investigations are being carried out in the fields of astronomy, atmospheric sciences and long-term climatic research using satellites, balloons, sounding rockets and ground instruments.

(b)&(c) The multipurpose INSAT satellite system which is one of the largest domesticsatellite systems in the world is extensively used for television broadcasting services through connectivity to more than 1100 TV transmitters, providing telecommunications including rural/remote area connectivity, networking of radio stations, gathering meteorological data for weather prediction and cyclone warnings, and providing search & rescue support. These satellites are also used for transmission of developmental programmes in rural areas and for educational training. The Indian Remote Sensing Satellite system is among thebest in the world for generating information useful for management of natural resources and the data from IRS are used world-wide. The IRS satellite data are used for identification & management of natural resources at national level including identifying location of zones of availability of ground water, monitoring of forest areas, identification of waste lands for development, pre- harvest agricultural crop acreage and production estimation, monitoring of irrigated command areas and mapping of bio-diversity in bio-rich areas of the country.